REMARKS

Claims 1 - 23 remain active in this application. The specification has been reviewed and editorial revisions made where seen to be appropriate. No new matter has been introduced into the application.

This application was filed on June 23, 2000, and thus has been pending for well in excess of five years. The application has also received six actions on the merits (in addition to the Advisory Action of February 10, 2005). Further, in the most recent office action of December 19, 2006, it is explicitly asserted at page 3, lines 3 - 6, that "The Examiner don't (sic) see how Applicants invention could be realized without any "downstream signaling" to cable drops or subscriber units" (emphasis in office action) which is a principal meritorious effect of the invention well-supported in the original specification; which lack of understanding is evident in previous office actions and thus clearly indicative (especially cumulatively) of the novelty and unobviousness of the invention. ***Accordingly, it is respectfully submitted that close supervisory review in accordance with M. P. E. P. §707.02 is in order and well-justified by the prosecution history of this application. Therefore such close supervisory review is respectfully requested.***

Claims 1, 7 - 11, 13 - 18 and 22 have been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta (both newly cited). Claims 2, 4 - 5, `12 and 23 have been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta and Sullivan. Claim 3 has been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta, Sullivan and Ortel. Claim 6 has been rejected under 35 U.S.C. §103 as

being unpatentable over Ritter in view of Citta and LoGalbo et al. Claims 19 - 21 have been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta and Ortel. All of these grounds of rejection are respectfully traversed for the reasons made of record in previous responses which are hereby fully incorporated by reference and the further remarks below.

As previously and repeatedly pointed out, the invention is a system for signaling detected conditions upstream over a distributed communication system, such as a cable access television (CATV) system, from cable drops, directional couplers or subscriber units (collectively referred to in the specification and claims as a "termination section") to a central facility. Given that such systems generally carry large amounts of data in a downstream direction from a central facility to subscriber units and may also provide upstream signaling services, it is imperative that the communication burden on the system to accommodate such signaling be minimized while providing robust and reliable communications (page 10, lines 16 - 19). This minimization of additional communications burden is achieved by avoiding any *need* for downstream communications such as communication of downstream polling or interrogation signals. In fact, the only downstream communications remotely contemplated in the practice of the invention are *completely optional* and essentially perfecting features of the invention which are *unnecessary to the practice of the invention in accordance with its basic principles*; for altering the polling frequency through the simple expedient of latching counter bits (as disclosed on page 15, lines 9 - 14) and for optional synchronization reset of counters in addition to the basic synchronization to a common radio signal or the like (as disclosed on page 17, lines 2 -

20) to shorten the synchronization interval, if desired, both of which are explicitly disclosed to be "perfecting features" (page 17, line 2) *which are explicitly disclosed to be unnecessary to the operation and successful practice of the invention in accordance with its basic principles and may or may not be provided, as may be desired in a particular implementation of the invention.* It should also be appreciated that both of these perfecting features are *optional* control functions which would be exercised only very infrequently and which could be carried out with very short signals which impose, at most, a vanishingly small and utterly negligible burden on the communication system if, in fact, such perfecting features are included in a given implementation of the invention.

The invention achieves such an avoidance of *any need for downstream signalling over the system and the corresponding burden on the communication system* by the simple expedient of using an existing, alternative synchronization signaling arrangement *external to the communication system.* Specifically, the invention provides universal time bases at *both* the central facility and the termination sections of the system which are synchronized to an external signal such as the radio time standard transmission from the National Bureau of Standards (page 12, lines 35 - 37) so that time slots are "independently but synchronously defined at the central station and the directional couplers by a universal time base at each location" (page 12, lines 30 - 33) and counted to establish unique correspondence of particular time slots with individual cable drops/termination sections which is accomplished autonomously at the termination sections. Therefore, the termination sections *do not require any signal all from the central*

facility and any *need* for downstream signaling is thus avoided. In fact, no time base or similar time slot counting is necessary at the central facility other than for error checking and to establish approximate boundaries between time slots defined at the termination sections and "[i]t should be appreciated that such counting to identify a time slot corresponding to a particular cable drop need only be performed at the directional coupler or, less desirably, the cable drop." (See page 13, lines 6 - 10). In this regard, the Examiner's attention is also respectfully called, once again, to page 16, lines 24 - 26. When it is considered that any downstream interrogation signal must contain enough information to uniquely identify each termination section to be interrogated (e.g. for synchronization) as well as identifying the downstream signal as an interrogation signal, it can be appreciated that the total avoidance of such downstream signaling altogether by eliminating any *need* therefor through defining time slots "independently but synchronously" at the respective termination sections of the communication system removes virtually all communication burden of monitoring from the communication system.

Contrary to the Examiner's assertions on page 4, third full paragraph, of the current office action, the feature of independent time bases synchronized to an external signal which supports the meritorious functions and effects of the invention are, in fact, explicitly recited in the claims. Specifically, independent claims 1 and 18 (the only independent claims in the application) contain the following recitations (emphasis added) claim 1:

"means for coupling said sequence of tones to said communication path *during a time slot* associated with a

said cable drop *determined by a time base at said termination section of said communication path*, and

"means for decoding said sequence of tones at said central facility in accordance with respective *time slots as determined by a time base at said central facility*, said respective time slots as determined by said time base at said central facility including a time slot corresponding to said time slot as determined by said time base at said termination section of said communication path, *said time base at said termination section and said time base at said central facility being independent of each other and responsive to a broadcast time signal.*"

Claim 18:

assigning a time slot of a plurality of sequential time slots to each terminal unit of a group of terminal units, *said time slots being independently but synchronously defined at a termination section and a central station of said system*, respectively".

Nothing of the sort is taught or suggested by the prior art applied by the Examiner as previously pointed out in detail, particularly in the responses filed August 12, 2005, and May 2, 2006, incorporated by reference above. Ritter,, Citta, Sullivan, Ortel and LoGalbo et al. are all interrogator/responder systems *which require downstream signaling* and which, as such, whether considered singly or in any combination, cannot lead to an expectation of success in achieving monitoring of conditions at terminal sections of a distributed communication system *without any need for interrogation or other downstream signaling* and thus eliminating or greatly reducing any burden on the bandwidth of the communication system due to or in order to accomplish such monitoring. Thus the Examiner has clearly continued

to fail to make a *prima facie* demonstration of obviousness of any claim in the application and, moreover, has taken the position, through explicitly admitted lack of understanding, that the invention must be an interrogator/responder system, contrary to explicit teachings of the present specification, and has essentially sought to justify ignoring explicit recitations of the claims which support avoidance of a need for interrogation and downstream signaling for purposes of remote condition monitoring. Further, the Examiner continues to dismiss previously submitted demonstrations of clear and patentable distinctions from the prior art based on the same admitted lack of understanding. By so doing, the Examiner has also completely failed to address the clear and patentable distinctions of the claimed subject matter from that taught by the references applied against the claims. Rather, even the Examiner's explicitly admitted lack of understanding of the invention and *continued insistence that downstream signaling is necessary* is clear evidence that the level of ordinary skill in the art (which the Examiner is charged with applying) does not extend to even the remote vicinity of the present invention and which must be considered to be unobvious therefrom. Therefore, it is respectfully submitted that all the grounds of rejection asserted by the Examiner are clearly in error and untenable. Accordingly, upon reconsideration, withdrawal of the asserted grounds of rejection is respectfully requested.

It is also respectfully submitted that entry of the above-requested amendments are well-justified. The amendments are limited to minor editorial revisions of punctuation which are clearly evident from the original text. The claims are not amended. Therefore, no new

issue can possibly be raised by the requested amendments. Rather, the amendments serve to place the application in condition for allowance or better form for appeal since potential issues of form are reduced or eliminated. Accordingly, entry of the above amendments is respectfully requested.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

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